

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An optical proximity spatial transmission system for transmitting information data optically through a local space, the system comprising:

a first communication device having at least one of a first light emitter or a first photodetector installed thereon;

a second communication device having installed thereon at least one of a second photodetector which detects light from the first light emitter or a second light emitter which emits light toward the first photodetector;

an anti-scattering lens disposed either behind the first or second light emitter or in front of the first or second photodetector;

an electromagnetic coupler adapted to transfer power between said first communication device and said second communication device; and wherein

the first communication device being rotatable around an axis thereof aligned with an optical axis of at least one of light outgoing from the first light emitter or light incident upon the first photodetector while the second communication device is fixed on the optical axis.

2. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 1, wherein a spot diameter of light emitted from one of the first or second light emitter toward one of the first or second photodetector at the one of the first or second light emitter is larger than an oscillation in a direction of an off-axis deviation caused by rotation.

3. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 1, wherein a spot diameter of light emitted from one of the first or second light emitter toward one of the first or second photodetector at the one of the first or second light emitter is larger than at

the one of the first or second photodetector.

4. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 1, wherein information data is transmitted in a base band domain.

5. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 1, wherein a transfer rate of information data is 200 Mbps or more.

6. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 1, wherein at least one of the first or second light emitter is a laser diode.

7. (Original) The optical proximity spatial transmission system as set forth in claim 1, wherein the first communication device is a rotating-side circuit board installed on a rotating drum of a rotating drum head unit while the second communication device is a stationary-side circuit board connected to a stationary drum of the rotating drum head unit.

8. (Previously Presented) The optical proximity spatial transmission system as set forth in claim 7, wherein:

at least one of the first light emitter or first photodetector on the rotating-side circuit board is connected to at least one of the second photodetector or second light emitter on the stationary-side circuit board by an optical fiber; and

an anti-scattering lens is provided between the optical fiber and at least one of the first or second light emitter or first or second photodetector.

9. (Original) The optical proximity spatial transmission system as set forth in claim 7, wherein optical spatial transmission is done in a space for rotation bearing of the rotating drum, formed in the rotating and stationary drums of the rotating drum head unit.